

Backcountry Use

Despite the well-known attachment of tourists to their cars, vans, and RVs, about 75 percent of Yellowstone's visitors do get out to walk along a park trail for a better view of the scenery and wildlife. A far smaller portion, less than 10 percent, go into the backcountry to experience a sense of solitude and distance from more populated landscapes.







Although the term has no official definition, more than 95 percent of the park is considered "backcountry," or generally undeveloped land away from park roads, hotels, stores, and campgrounds. In compliance with the Wilderness Act, a study completed for Yellowstone in 1972 recommended that more than two million acres of the park be formally designated as wilderness. Congress has not acted on this proposal, but areas recommended for wilderness status are managed so as not to preclude

such a designation in the future. The backcountry remains undeveloped except for a network of 38 patrol cabins, five fire lookouts, and a relatively sparse trail system.

About 20 percent of the hikers found on park trails during the summer use a backcountry campsite; the others are just out for the day. Most trail use originates from within the park although some groups, primarily horse parties, enter on trails from adjacent national forests. To protect the soils and vegetation, overnight stock use is not permitted until July, and is restricted to certain campsites, but only a few trails are off-limits to stock. To prevent resource damage and conflicts with other users, bicycles are not permitted on any backcountry trails or off-trail. Cyclists can use service roads not open to vehicle traffic, abandoned road beds, and some frontcountry developed area trails.



TRENDS IN BACKCOUNTRY USE

During 1998, backcountry campsites were used by 21,087 visitors for an average of 1.9 nights, and a total of 45,612 "people-use nights." Similar to trends seen at other western parks such as Rocky Mountain and Glacier, after peaking in 1977 at 55,391 people-use nights, Yellowstone backcountry use had dropped to 25,188 by 1988 (when fires closed much of the area), but quickly rebounded. Since 1993, backcountry use has leveled off above 45,000 people-use nights. About 18 percent of these backcountry users are traveling with boats and 8.5 percent on or with horses; the remainder are backpackers. Little reliable data exist on the numbers or trends in day use.

The amount of backcountry use associated with commercial outfitters rather than by independent travelers has risen sharply during the 1990s and now accounts for about 18 percent of all backcountry use.

MINIMUM IMPACT, MAXIMUM ENJOYMENT

The park's backcountry management goal is to accommodate wilderness use in ways that provide the highest possible value to the visitor with the minimum possible impact on the park's natural features and cultural sites. The frequency and design of trail signs and markers, bridges, and campsite facilities, and the use of mechanized equipment for trail construction, maintenance, and emergencies can all affect visitors' backcountry experiences, and the right balance must be maintained between adequacy of assistance and intrusiveness. A *Backcountry Management Plan* has been prepared to guide human activities into the wild lands that make up most of the park acreage. But little staff time can be spent monitoring the effects of use on cultural and natural resources beyond the roadways.

Risk and rescue. Wilderness terrain, mountain storms, and wildlife encounters increase the risks to visitor safety in the backcountry. Park staff are trained and equipped to respond to visitor requests for assistance in any season. Park personnel perform many searches for lost visitors, and rescue those injured in the backcountry. Search-and-rescue expenses range from \$45,000 to \$65,000 each year, and these operations affect the peace and quiet of other wilderness users.

Reports of bear activity may lead to the posting of warning messages and cause temporary trail or campsite closures as visitors' desire for access is balanced against the need to protect them and the bears. During spring runoff, some trails are closed due to dangerous river crossings; even during lower water levels, river fords of the Lamar, Yellowstone, and Snake pose cold, swift challenges to backpackers. Boaters may underestimate the

(See "Search and Rescue," page 6-53.)

speed at which the winds can turn Yellowstone, Lewis, and Shoshone lakes from glass to white-caps, and skiers risk bitter temperatures, blizzards, and avalanches. While many backcountry travelers seek to experience nature on its own terms, others seek more contact with those who know the territory prior to embarking on their own wilderness journey.



Workers in the wilderness. A resource specialist spends about one-third of his time overseeing wilderness use. In addition to the headquarters backcountry office with two full-time and several seasonal employees, during the peak season 10 backcountry offices are distributed throughout the park, staffed by seasonal rangers and volunteers who help plan trips and issue per-mits for backcountry use. Patrolling rangers alert these offices of trail conditions and safety hazards, monitor use,

clean campsites and toilets, clear trails of trees that fall after windstorms, assist wilderness visitors, and protect park resources. Especially in autumn, boundary patrols are increased to prevent accidental or intentional encroachment by big game hunters. But budget constraints have reduced the number of seasonal backcountry rangers from 17 to 10 since 1988—leaving each ranger responsible for an average of 200,000 acres and 100 miles of trail.

Major trail construction is assigned to seasonal maintenance crews who work with the rangers to reroute trails when necessary and design drainage structures and bog bridges around areas prone to slumping, wet conditions, or other erosion. Some assistance has been provided by the Student Conservation Association and the Young Adult Conservation Corps, but in recent years fewer crews have been available for backcountry trail work, and the park has fallen behind in cyclic trail maintenance.

Maintaining history. U.S. Army cavalrymen stationed in the park constructed a network of simple log structures 10 to 15 miles apart—a day's travel on horseback or skis. Today rangers and trail crews on backcountry duty can find shelter and rations at 38 such patrol cabins, some of which date back to 1910. An evaluation of the historic importance of many of these cabins is underway, but much maintenance work must be completed to stabilize them for continued use. (See "Historic Structures," page 4–10.)



RECENT ACCOMPLISHMENTS

Backcountry zones. To help manage visitor use, Yellowstone's backcountry has been divided into three zones:

The Threshold Zone adjoins roads and developed areas where most visitor use is concentrated. It contains easily accessed, well-marked, short-distance trails that receive moderate to high use. Trees, rocks, and other impediments may be altered or removed to permit access by a greater variety of visitors.

- The Backcountry Zone includes all trails and campsites outside of developed and threshold areas. These trails range from moderately challenging to more challenging, and have the minimum marking necessary to guide users, but they are generally well-maintained and cleared for stock travel. They are classified as low, moderate, or high use, reflecting the level of day, overnight, and stock use. Except in special circumstances, they will not be widened, hardened, or bridged to improve accessibility beyond the trail standards.
- The Pristine Zone includes any area that has no maintained trails.

HIKING THROUGH HISTORY

Long before Yellowstone was inhabited by Euroamericans, American Indians came in search of the game that were plentiful in the area. Many of the Indians' trails that evolved from centuries of use continue to be traveled on today—the easiest paths across rivers and through mountain passes. The most important of these became known as the Great Bannock Trail, named for the Bannock Indians of southeastern Idaho. For about 40 years after bison were eliminated from the Snake River plains in the 1840s, the Bannocks made an annual trek to hunt those remaining in the mountains and the Bighorn Basin, crossing the northern part of what became Yellowstone National Park.

The most historically significant trail in the park was blazed in 1877, when some 750 Nez Perce Indians, led by a group of warriors who refused to settle on a small reservation in Idaho, fled east in hope of joining their Crow allies on the plains. As they crossed Yellowstone's central plateau on foot and horseback, the U.S. 7th Cavalry followed in their pursuit, cutting trees and dragging



wagons along what is now called the Mary Mountain Trail. The total distance of more than 1,100 miles covered by the Nez Perce, before their surrender in Montana's Bear Paw Mountains three and a half months later, has been designated as the Nez Perce National Historic Trail. Information is available to illustrate the routes through the park and explain significant sites along the way.



Solitude. Yellowstone's *Backcountry* Management Plan does not set overall use limits for any trails or zones. Information about use levels and the likelihood of contacts with other parties is given to hikers to help them make their own choices and to help park managers set work priorities and standards for trail maintenance. Motorized access is prohibited except in case of life-threatening emergencies, and park staff may use motorized equipment only if a necessary task cannot be completed without it. Such restrictions mean that it takes more time and labor to clear and maintain trails, restore patrol cabins, and service telecommunications and resource monitoring equipment. However, wilderness values are given priority over efficiency in the backcountry, unless using technology in a quick and sensitive manner would reduce the impact to park resources.

While some parks have serious resource concerns and visitor conflicts over the number and routing of scenic overflights, this intrusion has so far been relatively infrequent in Yellowstone. During 1999, 300 overflights were reported in the park, up from 220 in 1995. Although most of these flights are conducted as part of authorized research projects, the goal is to minimize the adverse effects of overflights on park visitors and resources. Yellowstone is also seeking to limit commercial "flight seeing" and other activities that detract from wilderness quiet.

Backcountry information. A backcountry trip planner provides information on the permit and reservation system, stock use, advice on traveling in bear country, and a campsite map. Brochures are also available on backcountry etiquette and safety, horse use, and backcountry boating. The stations where nearly all permit holders check in have videotapes on backcountry safety that each permit holder is required to see and other party members are encouraged to watch.

Occasionally the park reroutes, renames, or abandons trails, but it takes time for these changes to appear on maps or in printed guidebooks. Information at backcountry offices and trailheads needs to be standardized with regard to safety messages and regulations and should address route-specific information where appropriate. New displays have been planned for major trailheads to provide safety tips and resource information, but construction and installation have been delayed due to reduced funding.









Trails. The present number and distribution of trails appears to be adequate to meet present and future demands, and off-trail hiking is permitted in most areas for those who want a more challenging experience. Trail conditions vary, but progress has been made in better marking of trailheads, and signing and facilities have evolved to better meet hikers' needs and preferences.

The park is crossed by two long-distance trails, the Continental Divide National Scenic Trail and the Nez Perce Historic Trail. Past problems with finding the trails and locating suitable campsites at a reasonable day's interval have been addressed in the park's *Backcountry Management Plan* and through better trip planning information.

Campsites. Backcountry camping has generally been limited to designated sites since 1973, primarily to protect bears and campers from each other, but also to minimize the visual intrusions of human activity and prevent natural resource impacts such as campfire scars. In poor winter weather, campers are given greater latitude in choosing a campsite. Nearly all of the 287 designated backcountry sites have storage poles so that food and other attractants can be secured away from bears. A few campsites have been designed to meet accessibility standards. Each site has restrictions on group size (from 4 to 20 people), length of stay, and whether campfires or stock are permitted. Monitoring is done to protect plants from current stock-grazing levels, but no baseline inventory has been prepared to help detect changes in species composition over time as a result of stock grazing.

Advance reservations. To take some of the uncertainty out of visitors' backcountry camping plans, some of the sites are available for reservation in advance, by mail, or in person for a \$15 fee. This fee money, which totalled \$24,000 in 1998, is being used to operate the computerized reservation system. No fee is charged for backcountry sites reserved less than 48 hours in advance. Although campsites in a few popular areas such as Shoshone Lake and Slough Creek sometimes fill before all interested parties have been accommodated, Yellowstone's backcountry usually has a site available to satisfy every camper. Computerization has provided easier access to permit information across the park and reduced



the time it takes to issue a permit, but the number of telephone calls to the headquarters' backcountry office increased by 40 percent after the reservation system was introduced in 1995.

Commercial outfitters. The use of outfitters and guides has become increasingly popular among visitors, and offers some advantages from a resource management standpoint. Professional outfitters and guides tend to be better informed than independent

travelers are about minimum-impact camping and better motivated to follow the rules, since they want the quality of their favorite routes maintained for future clients. But the number of outfitters is limited to ensure a fair balance between private and commercial use of backcountry parties trails and campsites. There are 29 outfitters that are authorized to conduct trips for backpackers, and 49 who are permitted to use pack stock or horses for riding; these permits may be revoked if park rules are violated. All of the outfitters are required to pay an annual fee and to pass a certification program to help ensure the quality and safety of the visitor's experience.

Program Needs

- IMPROVE TRAIL INFORMATION. Park staff need to work with trail guide authors and trail map companies to update trail names, locations, and conditions in publications.
- Restore backcountry cabins. In 1983 a historical architect evaluated the preservation maintenance needs of 11 historic patrol cabins, and several have since been restored. But most still require work to restore foundations, rafters, and rotting sill and wall logs; replace floors and roofs; and repair windows and doors damaged by wild animals, weather, and general wear. Priority has been given to the cabins at Peale Island and Clear Creek, on Yellowstone Lake, and the Fox Creek and Harebell cabins in the park's south district—each of which is estimated to cost up to \$50,000 in labor and materials to restore.
- IMPROVE ACCESSIBILITY. Persons with hearing, sight, or other limitations should receive detailed information on trail conditions and the risks they may encounter so that they can determine for themselves whether they would be capable of reaching a destination or campsite. On trails where the natural topography will allow it, some backcountry sites will be modified to accommodate wheelchair users.
- Restore backcountry staff. Regular trail maintenance crews are needed to maintain an average of 200 miles of trail each year by replacing water bars and other drainage structures, repairing washouts and restoring tread, and replacing needed creek and bog bridges. Additional monies and crews are needed for trail clearing every spring, which has become a larger chore since the 1988 forest fires left hundreds of thousands of trees more likely to "wind-throw" across trails during each long Yellowstone winter.

Additional rangers are needed to provide resource protection and visitor assistance in the backcountry. More staff are also needed to keep the permit stations open at locations and times convenient to park visitors.







- Monitoring program. Park staff need to be able to spend more time and use more sophisticated techniques to monitor day use and assess the condition of trails, campsites and stock-grazing sites. The resulting information could be used to develop better long-range management strategies to protect wilderness resources and enhance visitor experiences.
- AIRCRAFT OVERFLIGHTS. In order to preserve the solitude that can be experienced in the backcountry of Yellowstone and other wilderness parks, legislative protection is needed to restrict the number and type of aircraft allowed to fly through park airspace.







BACKCOUNTRY MANAGEMENT

STEWARDSHIP GOALS



Trained staff perform regular backcountry patrols to make visitor contacts, conduct searches and rescues when necessary, and monitor and protect resources and wilderness values while accommodating reasonable uses. Backcountry cabins are well maintained and sustainable operational practices have been adopted.



Staff proactively inform and educate the public about opportunities for backcountry experiences, resources, risks, and minimum-impact practices through up-to-date exhibits, programs, printed information, and personal contacts.



Visitors can receive backcountry use permits and orientation in a timely manner at many convenient locations during high-use hours and seasons.



Sufficient and well-trained trail crews complete cyclic trail clearing, maintenance, and reconstruction with minimal adverse impact on visitor experiences and park resources.

CURRENT STATE OF RESOURCES/PROGRAMS



Backcountry opportunities are plentiful and generally provide satisfactory visitor experiences; but staff struggle to maintain training and regular backcountry patrols for safety, resource monitoring, and visitor contact.



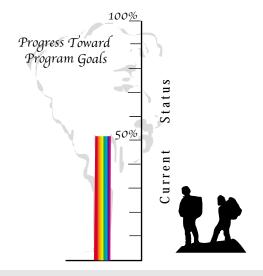
A backcountry trip planner and maps provide information for those requesting it on-site or in advance, but proactive orientation and interpretive exhibits, programs, and minimum-impact outreach efforts are limited.



Backcountry offices are often inconveniently located, too small, and not sufficiently staffed to operate at needed hours and locations.



Backcountry management plans outline desired conditions for trails, campsites, stock grazing sites, and park resources, but staff are limited in time and funds available to meet the standards.



1998 Funding and Staff

\$ 983,000	Recurring Funds Yellowstone N.P. Base Budget Cost Recovery/Special Use Fees
16.24 FTE	Staff

The human resources and funding necessary to professionally and effectively manage the park to stewardship levels will be identified in the park business plan.